



CROSSTALK



A Publication of the TRW Amateur Radio Club

FEBRUARY 1995 CALENDAR

Every Monday: DCS Net on 145.32 Repeater at 7:30 PM

Every Wednesday: Emergency Communications Team Net on 145.32 Repeater at Noon

Every Thursday: Club Net on 145.32 Repeater at 7 PM, Club news, etc.

Every Friday: Club Breakfast in Bldg S cafeteria, 7-8 AM

Feb 7: Executive Board Meeting, E2/1200, 5:15 PM - Note New Start Time

Feb 14: Emergency Communications Team Meeting, R3/1413, Noon

Feb 14: Club Meeting, 5:30 PM at Petrelli's

Feb 17: Technical Chairman's Meeting, Bldg S Shack, Noon

Feb 18-19: ARRL International DX Contest, CW

Feb 25: Swap Meet, Parking lot, NW corner of Aviation & Marine, 7-11:30 AM, T-HUNT at Noon

EDITORS NOTES: The deadline for CROSSTALK submissions is the executive board meeting on the first Tuesday of each month. If you have something and will be later than that please call and I will try to accommodate you.

TRW ARC Retirees Net: Bill Schrecengost, KE6LB reports that the retirees net held Mon.- Wed.- Fri. on 7.185 MHz will be moved to 1 PM PST to account for propagation changes and QRM from European commercial broadcast stations. Bill also mentioned that several TRW retirees also check into the California-Hawaii Net, Mon. thru Fri. on 14.340 MHz from 8:30 to 9 AM and occasionally move off to 14.256 MHz for a longer chat.

MEMBERSHIP RENEWAL - DUE NOW!

CLUB NEWS: I hope all TRW ARC members had a happy holiday season. I didn't get any new Ham Radio goodies this year but had plenty of time for rag chewing, working on home-brew projects and straightening up my shacks. Yes, I now have two shacks, the main one remains in a spare bedroom on the second floor and the second shack is on my workbench in the garage. I built a remote, through-the-coax switch box using 12 volt relays to permit switching between my rotary dipoles from either location. The garage shack allows me to monitor the bands or rag chew while home brewing and is strictly QRP.

I didn't mention the banquet awards in the last newsletter. Ray Enriquez, KD6IGI walked away with the Field Day Chairman's Award for the second year in a row. Rich Sauer, N6CIZ, our hard working ECT Chairman received the Presidents Award. Rich has held almost every position in the club at one time or other and participates in most club events.

A work party installed some antennas on the Building S roof and the new shack should be operational by the time you read this newsletter. The same few people show up at all the work parties. They are a good opportunity for newcomers to learn about our hobby and the work isn't really hard, so why not come out and give the club a hand at the next one. The Thursday evening club net is the best way to keep up on club activities.

NEWCOMERS BOOKS:

CQ Communications has recently published two excellent books of interest to anyone who wants to get more out of their HF antenna systems. *Lew McCoy On Antennas* by Lew McCoy, W1ICP is a very good introduction to HF antennas with a minimum of theory. This book is full of useful facts and just plain good advice on basic antennas from a man with over 40 years of hands on experience. Dipoles, Yagis, Quads, Transmatches, Mobile and a little on VHF antennas is presented in Lew's easy to read style. If you are new to HF and want a great introduction to antennas buy this book first.

Baluns are an important element in many HF antenna systems. They are used for impedance matching and to couple unbalanced feedlines like coax to balanced lines without unwanted RF on the outside of the coax. The undisputed expert in this field is Jerry Sevick, W2FMI. His new book *Building and Using Baluns and Ununs* contains everything any ham needs to know about these useful devices. Most of this work has been published in CQ and *Communications Quarterly* magazines over the past few years but it's nice to see it in one volume. Jerry also summarized his interesting work on short verticals in four appendices to the book; great reading for those of us with space restrictions. Every serious antenna experimenter should have a copy of this excellent book. 73 de KJ6GR.

Antenna Topics

There is a growing interest in the lower HF bands now that we are getting close to the Sunspot minimum. A new low band vertical was reviewed in the December issue of *CQ* magazine¹, the CTSVR vertical from Uni-Hat Corporation. This antenna consists of a 31 foot vertical radiating section and a 15 foot capacitance hat and operates on 160, 80, 40 and 17 meters with only six 34 foot radials. Read the review for more details on this new product, Uni-Hat may be contacted at 1-800-807-5646.

Gap multiband vertical antennas have enjoyed a good reputation since they were introduced a few years ago. January 1995 *QST* contains a review of the Challenger DX-VIII model² which covers the 80, 40, 20, 15, 12, 10, 6 and 2 meter bands. For those that are also interested in the theory of operation of the Gap style antenna a side-bar contains a good explanation. A separate article on vertical antennas with elevated feeds³ appears in the Technical Correspondence of the same issue and is interesting reading for anyone thinking about purchasing an antenna of this type.

Several articles have appeared recently on *Near-Vertical-Incidence Skywave* communication, NVIS for short⁴. This form of communication uses low antennas to get very high radiation angles which result in short communication distances. With the solar flux below 100 the only bands that will support this mode are 75/80 and 160 meters. Simply put up a dipole up between 1/8 and 1/4 wave high and excellent communication will be had to about 1000 miles out. I used a propagation program, MINIPROP PLUS⁵, to compute when this mode is available to us here in the L.A. area. For a solar flux of 90 good communications to all of California should be possible during daylight and out beyond 500 miles 24 hours a day. This will provide plenty of fine QSOs anytime and could be a real plus in an emergency situation.

73 de KJ6GR

1. McCoy, Lew, W1ICP, "CQ Reviews: The CTSVR Uni-Hat Antenna", *CQ*, December 1994, pp. 24-28.
2. Kennamer, Bill, K5FUV, "Gap Challenger DX-VIII Vertical Antenna", *QST*, January 1995, pp. 76-77.
3. Belrose, John, VE2CV, "A Vertical Monopole With Elevated Feed- A Full-Length Radiator", *QST*, January 1995, pp. 78-79.
4. Farmer, Ed, AA6ZM, "A Look at NVIS Techniques", *QST*, January 1995, pp.39-42.
5. MINIPROP PLUS is available from Sheldon Shallon, W6EL Software, 11058 Queensland Street, Los Angeles, CA 90034-3029.



HAMCON '95

ARRL SOUTHWESTERN DIVISION CONVENTION

Aboard the **QUEEN MARY** (Long Beach, CA)

September 1-3, 1995 (Labor Day Weekend)



Special Queen Mary Hotel Room Convention Rate: \$74 (+ tax).

For reservations mention HAMCON (ARRL SWD Convention): (800) 437-2934.

Also, there are discount rates for group hospitality suites.

Exhibit Hours: Friday 5pm-8pm, Saturday 9am-5pm, Sunday 9am-noon

Highlights: Featured Speakers, Hospitality Suites, DXCC Checking, Auction, Ladies Program, Grand Banquet, Tech Programs, ARRL Meetings, Prizes Galore, RV Parking, License Exams, W6RO Station, Flea Market, Wouff Hong, Van Display, Family Fun, Contests, Forums, Special Awards & Exhibits.

Number

Total

_____ **EARLY BIRD REGISTRATION** (by 5/20/95) @ \$10 _____

Includes:

Parking only \$1

Free \$7 Ship Admission

Receive Free \$5 Logo Pin

Special! Early Bird Drawing

Save \$5 off Regular Admission (\$15)

_____ Saturday Luncheon @ \$15 _____

_____ Saturday Grand Banquet @ \$25 _____

_____ Sunday Breakfast @ \$12 _____

_____ Extra Convention Logo Pins (limited supply) @ \$ 5 _____

TOTAL ENCLOSED _____

Name _____ Call _____

Name _____ Call _____

Name _____ Call _____

Address _____

City _____ State _____ Zip _____

Checks payable to: HAMCON Inc., P.O. Box 2111, Winnetka, CA 91396

For Additional Info: Chairman Nate Brightman, K6OSC (310) 427-5123

For Nearby RV hook-ups: Shoreline Village RV & Camper Park

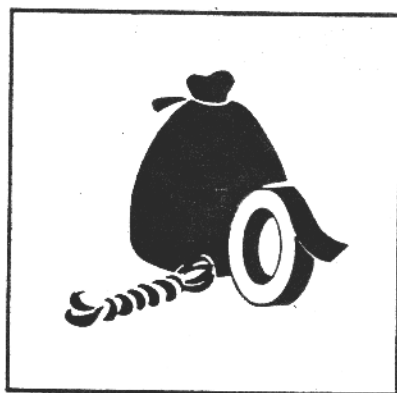
200 W. Shoreline Dr., Long Beach, CA 90802 (310) 435-4960

Talk-in Frequency: 145.52 MHz Simplex

ESP FOCUS



ROPE, TAPE AND TRASH BAGS



WHY

Rope and tape are important supplies to have after an earthquake to help rescue trapped victims and secure loose objects. You may also need heavy trash bags to store human waste since sewer lines may be inoperable. Include heavy trash bags--as well as rope and tape--in your earthquake preparedness kits.

ROPE

Rope can be used hand-in-hand with tape to secure loose objects or bind them together for transportation. In an emergency, it can also be used to help rescue trapped victims. It's extremely important that persons using rope to secure objects have a working knowledge of knots and know how to secure the objects to sturdy anchor points.

Make sure you get the right type of rope. If you are not trained in technical rope systems, use utility rope, rather than supermarket rope, which is not safe for emergency/disaster applications. Experienced urban or wilderness rescuers can use 1/2-inch static kernmantle rope for rappelling, moving victims in stokes, and other technical rescue operations. Persons who have forgotten their military or scout training in ropes and knots can pick up a manual on basic knots and rope techniques at an outdoor sporting goods or camping store.

N O V E M B E R

DO NOT attempt any technical rope systems without basic training from qualified wilderness or urban search and rescue instructors.

TAPE

Another valuable earthquake supply kit item is duct tape. Its adhesive strength and durability--even in outdoor conditions--make it superior to most common masking and cellophane tapes. It can also be easily torn by hand into needed lengths without cutting tools. You can buy duct tape at most paint, hardware and home supply stores.

In a disaster or other emergency, duct tape can be used to:

- Fasten coverings over damaged windows, walls, etc.
- Strap objects, supplies, boxes together for better security or to transport.
- Fasten protective coverings over perishable or nonweather-resistant items.
- Fasten liners over emergency/portable commodes.
- Seal waste products in plastic containers.
- Mark or label for identification (black permanent markers work well on the tape).
- Seal loose clothing such as pant legs and shirt sleeves against weather, insects, etc.

Although duct tape wears well, rotate your supply at least once a year by using it at home or work and replacing it with fresh rolls. Over time, it may become brittle and lose its adhesive strength.

Source: Michael D. Douglass, California Office of Emergency Services

TRASH BAGS

After a major earthquake, damage to sewer and water lines may leave sinks and toilets inoperable. Properly disposing human waste will reduce the risk of disease and contamination.

Before a quake:

- Include heavy trash bags in your earthquake kits.
- Designate an area away from your main living area or building that can be used if your bathroom is inoperable.
- Provide for privacy and ventilation.

Before using toilets or sinks:

- Check the surrounding neighborhood to see if sewer and water lines are intact. The sewer line to your home could be intact, but it could be broken three blocks away. Flushing your toilet could dump raw sewage into your neighbor's yard.
- Plan to use outside sanitation facilities.

Empty the bowls and line each of them with a heavy trash bag. If necessary, you can also use waste paper baskets. You also might want to purchase collapsible toilets used for camping. Add a disinfectant such as a portable toilet chemical, household chlorine bleach, or powdered chlorinated lime to the waste to help prevent disease. Follow the instructions provided and add water when necessary. Be sure to tie full bags securely and store them in a tightly covered garbage can, away from living, nursing, and food preparation areas.

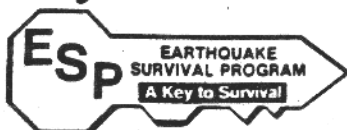
Source: *Earthquakes and Preparedness: Before • During • After*, Earthquake Preparedness Society

November 1991 Action: Fire Extinguisher

Contact a SCEPP office or a county ESP coordinator for a November 1991 Focus Sheet.

This focus sheet is produced as part of the Earthquake Survival Program (ESP). ESP is an awareness campaign designed to increase earthquake preparedness at home and work. ESP was developed by the County of Los Angeles. The Southern California Earthquake Preparedness Project (SCEPP), a project of the California Office of Emergency Services, and the counties of Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Ventura coordinate the campaign.

Things to do in '92



Published by:

Southern California Earthquake Preparedness Project/Governor's Office of Emergency Services

TRW ARC 1995 Events Calendar

January 3 Executive Board meeting 10 ECT meeting 10 Evening meeting 20 Technical Chairmans meeting 21-22 ARRL VHF Sweepstakes 28 Swap Meet	February 7 Executive Board meeting 14 ECT meeting 14 Evening meeting 17 Technical Chairmans meeting 18-19 ARRL International DX Contest, CW 25 Swap Meet	March 7 Executive Board meeting 4-5 ARRL International DX Contest, Phone 14 ECT meeting 14 Evening meeting 17 Technical Chairmans meeting 25 Swap Meet
April 4 Executive Board meeting 11 ECT meeting 11 Evening meeting 21 Technical Chairmans meeting 28-30 Dayton Ham Vention 29 Swap Meet	May 2 Executive Board meeting 5-7 West Coast VHF/UHF Conference 9 ECT meeting 9 Evening meeting 19 Technical Chairmans meeting 27 Swap Meet	June 3-4 ARRL VHF QSO Party 6 Executive Board meeting 13 ECT meeting 13 Evening meeting, Field Day Plans 16 Technical Chairmans meeting 24-25 Field Day 24 Swap Meet
July 11 Noon Picnic 11 Executive Board meeting 21 Technical Chairmans meeting 29 Swap Meet	August 1 Executive Board meeting 5-6 ARRL UHF Contest 8 ECT meeting 8 Evening meeting 18 Technical Chairmans meeting 26 Swap Meet	September 1-3 Southwest Division Convention (Queen Mary) 5 Executive Board meeting 9-10 ARRL VHF QSO Party 12 Noon Picnic 15 Technical Chairmans Meeting 30 Swap Meet
October 3 Executive Board meeting 10 ECT meeting 10 Evening meeting 20 Technical Chairmans meeting 28-29 CQ WW DX Contest, Phone 28 Swap Meet	November 7 Executive Board meeting 14 ECT meeting 17 Technical Chairmans meeting 18 Banquet 25-26 CQ WW DX Contest, CW 25 Swap Meet	December 5 Executive Board meeting 12 ECT meeting 12 Christmas Party (evening) 15 Technical Chairmans meeting 30 Swap Meet